



Enterprise Transformation and CIO/G-6 Lean Six Sigma Implementation

June 14, 2005



Purpose



Using the Lean Six Sigma Process to achieve organizational effectiveness

Approve Lean Six Sigma Implementation Plan

Approve Recommended Next Steps

CXO is functional Lead for CIO/G-6 Lean Six Sigma Implementation





Lean Six Sigma Outcomes

Become more efficient, effective, and quality centered in our business process management

Align with VDAS guidance in using Lean Six Sigma methods

Next Steps will highlight the CXO proposed development and execution of the CIO/G-6 Lean Six Sigma Implementation Plan

Identify Phase I Projects and/or Rapid Improvements Events (RIEs) For Your Consideration

Capture Improvements through metrics



Prepping an Organization For Lean Six Sigma



Step 1	Step 2	Step 3	Step 4	Start the Lean Six Sigma approach
Assess the organization Understand the "As-Is" state Stakeholder interviews to create Voice of the Customer (VOC) Identify gaps in Approach-Deployment-Results	Re-evaluate the organization's objectives Identify new strategic objectives	 Build strategy map Communicate the strategy Link business processes to strategic destination Identify core processes as they help in completing the strategy map 	Collect data on several processes Assess risks/potential Select Lean Six Project	

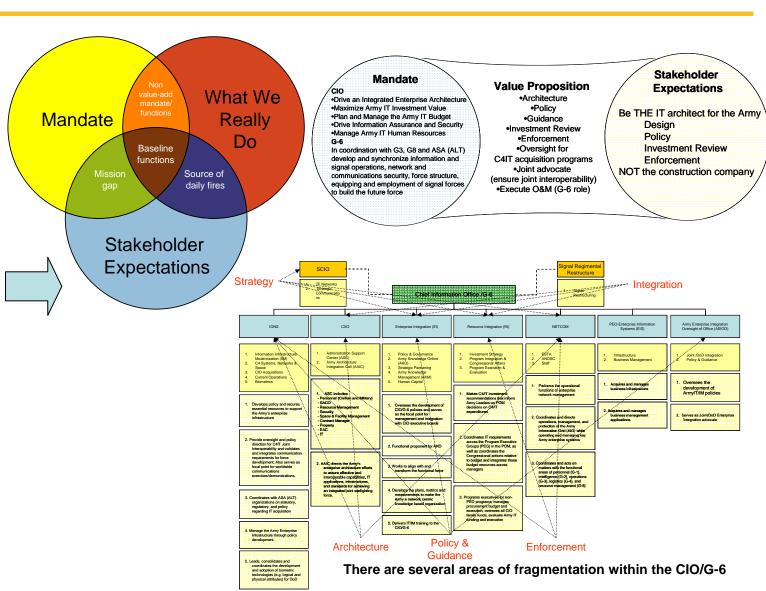
- **D:** Define the strategic direction of the organization
- M: Set measures for the strategic objectives of the organization
- A: On a continual basis collect data on the measures set and analyze using Six Sigma tools and techniques
- I: Identify the opportunities improvement and convert them to Six Sigma projects for improvement
- C: Set up a management control action of continuous reviews on the improvements made on the Six Sigma projects





Step 1

- Assess the organization
- Understand the "As-Is" state
- Stakeholder interviews to create Voice of the Customer (VOC)
- Identify gaps in Approach-Deployment-Results



Source: Touchstone





Step 2

- Re-evaluate the organization's objectives
- Identify new strategic objectives





CIO/G-6 Vision, Mission and Goals

Vision:

Deliver a joint net-centric information enterprise that enables warfighter decision superiority.

Mission

Provide architecture, governance, portfolio management, strategy, C4 IT acquisition oversight and operational capabilities to enable joint expeditionary net-centric information dominance for the Army.

Goals:

- Develop and maintain a secure, seamless, interdependent LandWarNet network by leading development and enforcing the use of an integrated enterprise architecture.
- Lead enterprise integration to achieve decision superiority by transforming processes, applications and data into network-centric capabilities across the Army.
- Protect and defend the Army's systems, networks, and information.
- Ensure Army information management and information technology investments maximize Army and Joint capabilities.
- Develop the Army's information technology and information management knowledge and skills to support mission needs.
- Deliver an integrated enterprise strategy that influences Army and Joint use of information management and information technology in furthering the warfighting capabilities.

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Objectives:

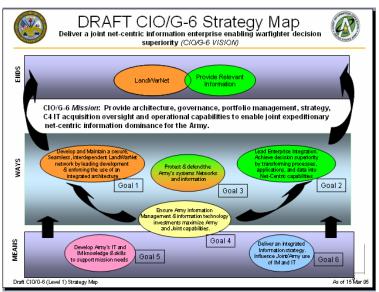
- Develop, coordinate, validate, and implement a C4/IM capital planning and investment strategy for the enterprise (includes policies, oversight, and control)
- Ensure development and regularly monitor performance measures for information management and information technology investments
- Affect the acquisition of C4 through the JCIDS process, empower AAIC for acquisition to ensure systems are Joint from birth (Imperative 4)
- Define and implement an Army Portfolio Management process consistent with OSD policy
- Establish/manage enterprise license agreements to simplify acquisition and provide cost avoidance
- f) Develop and submit Information Technology budget

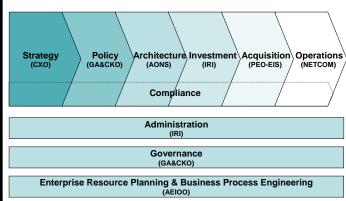




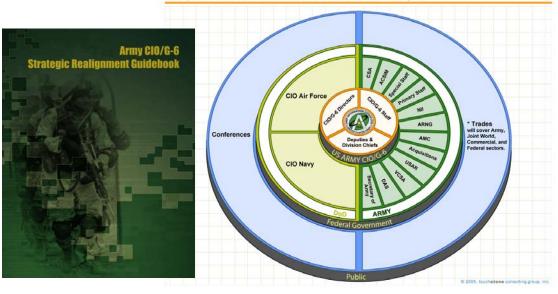
Step 3

- Build strategy map
- Communicate the strategy
- Link business processes to strategic destination
- Identify core processes as they help in completing the strategy map





Army CIO/G-6 Communication Stakeholder Analysis



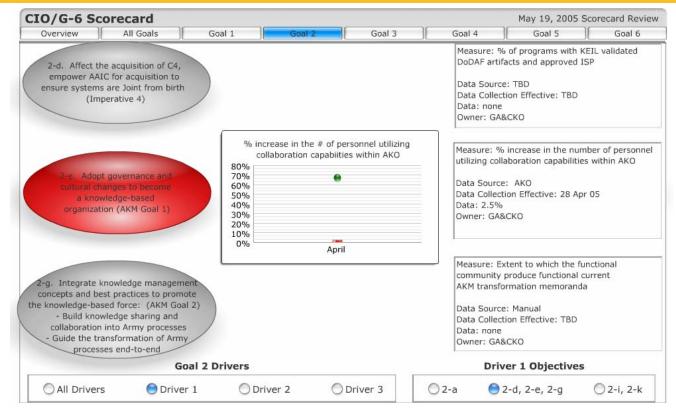




Step 4

- Collect data on several processes
- Assess risks/potential
- Select Lean Six Projects







Lean Six Sigma Approach: DMAIC



Define

Measure

Analyze

Improve

Control

- Develop problem description and goals in a project charter
- Define customer data to collect and methods
- Review historical data (if exists)
- Draft a highlevel map of the current state process
- Set up a team plan and guidelines

- Identify critical quality customer requirements
- Evaluate the existing measurement system
- Develop a measurement system if you don't already have one
- Observe the process
- Develop data collection plans
- Collect baseline data

- Identify and analyze process steps that add value
- Identify potential root causes for problem areas
- Target places where there is a lot of wasted time
- Prioritize root causes
- Map the future state process in depth

- Develop potential solutions
- Review best practices to see if any can be adapted
- Develop criteria for selecting solutions
- Develop and implement solution (Test)
- Implement solutions)
- Confirm attainment of first project goals

- Document the new, improved procedure
- Map the Ideal Process State
- Continue "Train the Trainer" program
- Set up continuous procedures for tracking and reporting key process metrics
- Identify lessons learned



Selection of Projects or RIE's Using G-8 Guidance **



- ** G-8 is leading Lean Six Sigma until DUSA for Transformation is ready to assume duties
- G-8 Guidance on selection criteria for Projects and RIE's affects selection of CIO/G-6 Projects or RIE's

Guidance:

- -- "Any initial analysis of a process... will yield opportunities for eliminating waste... The historical stats are that once completed with a cycle of improvement across a value stream 50%+ savings is common."
- -- "In a successful deployment (Lean Six Sigma), additional manpower is not necessary and is discouraged."
- -- "(Lean Six Sigma) processes are improved and there would be a <u>decrease in requirements</u> for that process and a resulting decrease in funding for that process would follow."



CIO/G-6 Support Requirements



- Resources:
- Roles –
- <u>Champion -</u> An executive level manager responsible for guiding Lean Six Sigma Efforts to include follow-on and control (CXO)
- Black Belt Certified through training and has successfully executed several Six Sigma projects. Works Full-time leading RIE's on Lean Six Sigma. Includes_objective leading, coaching, problem solving, and ensuring the team delivers results. (Contractor) * Do not have
- <u>"Barrier Buster"</u> a person empowered by Leadership to enter an RIE and settle a "roadblock", emotional outburst, etc. This person must be available while RIE's in progress. (Deputy Director, CXO)





CIO/G-6 Support Requirements

- "Lean Core Team" Each HQDA staff element have a one to three person full-time team to assist with the RIE's; perform follow-up metric collection and analysis; report to the CIO and G-8 as required. (Leverage existing resources)
- Organizational Business Unit Managers a person who is designated a Process Owner and will give time to the RIE team members as needed. Also, he/she will release personnel who know the process to work full-time on the RIE (7-10 days) and follow-up as needed.
- Specific RIE Team Members full-time for length of process
- Logistical Support to the RIE's: rooms/week, supplies, etc
- <u>Leadership Support</u> of Downstream decision making Barrier Buster; Sacred Cows, etc.





Recommendations

- CXO is the Functional Lead
- CXO approach to using Lean Six Sigma is to increase effectiveness
- Processes for Lean Projects or RIE's:
 - 1) Governance
 - 3) Architecture
 - **3) AEIOO**







Develop and Approve Implementation Plan	July 05	
Leadership approve RIE Project Plan with Milestones and IPR's	July 05	
Identify first of 3-5 RIE's	July 05	
Identify Process Owner for each RIE	July 05	
Select and Charter Lean Core Team (LCT)	July 05	
Identify RIE team members with Start date	August 05	
Develop RIE Project Charters with Leadership Approval	August 05	
Train the teams in Lean Six Sigma1st IPR for RIEs	August 05	
Develop Communication Strategy	October 05	





BACK-UP



SEC of the Army on Lean Six Sigma



"I've started a parallel business transformation focused on the institutional Army, focused around a technique called Lean Six Sigma, which is intended to reduce the cycle time, improve the output quality of administrative, manufacturing and repair processes.

I've been doing process improvement for 25 years of my business career, today it's called Lean Six Sigma. Back in 1982 it was called Quality and Productivity Improvement. Then we called it Business Process Re-engineering. We've had several different names for the same thing. You look at the way you do business, and you change it for the better.

It's essentially to take the work out of a process and to apply it both to factory-type operations or repair, and also to a headquarters operation, like the Department of the Army..."

Secretary of the Army Francis J. Harvey 2/25/05





What is Lean Six Sigma?

- Lean: Initiative focuses on the separation of valueadded from non-value-added to eliminate the root cause of waste in processes, activities, etc.
- Six Sigma: The goal of Six Sigma is to focus on continuous improvement by understanding the customer's needs, analyzing business processes, and instituting proper measurement methods to assess customer satisfaction.
- Lean Six Sigma: The application of lean techniques to increase organizational quality, while combining the tools and culture of Six Sigma to improve efficiencies and focus on customers' issues.

Defining the Value Chain

Strategy Policy Architecture **Operations** Investment Acquisition (NETCOM) (CXO) (GA&CKO) (AONS) (PEO-EIS) (IRI) Compliance схо AONS PEO-EIS NETCOM GA&CKO 2-f: Develop and manage the Strategic 1-h: Enforce compliance with the AEA for all 1-a: Reshape Signal Units 4-a: Develop, coordinate and 4-e: Establish/manage enterprise 1-e: Deliver seamless C4I and Signal Communications Plan for CIO/G-6 Army C4 IT and information management (Imperative 1) implement a C4/IM capital agreements to simplify Warfighting Forces in support of the Army in (subset of AKM Goal 1) -Reshape people & equipment for planning and investment acquisition and provide cost Peace and War (Imperative 7) 2-m: Implement performance 1-i: Provide certification of Clinger-Cohen Act strategy for the enterprise 1-f: Manage the infostructure as an Enterprise -Joint Data Packages measures to provide accountability (includes policies, oversight, to enhance capabilities and efficiencies: compliance for all systems -Include satellite Architecture and track progress toward goals 2-a: Transform information management and and control) (AKM Goal 3) -Plan to "fix" tactical units for 5-7 years 3-b: Leverage biometrics for identity 4-b: Ensure the development information technology policies, processes, -Develop and maintain the technical and system mgmt and governance that facilitate the fielding of and monitoring of architecture in compliance with the capstone AEA 1-b/2-c: Network the Force, including -Sustain and re-capitalize communications and 6-a: Anticipate, develop and influence performance measures for integrated and interdependent capabilities all functional areas (logistics, computing infrastructure/Enhance communications Army, Joint and DoD force 2-b: Enable cross-domain sharing of information management & personnel, intelligence, etc) as structure and IM/IT strategies and knowledge among all decision makers to information technology part of one Army Enterprise -Develop and maintain the Army concept of operations plans, e.g. Quadrennial Defense investments for the Army ensure enterprise process integration (Imperative 3) for network operations at the enterprise level Review, National Security Strategy, -d/4-c: Affect the acquisition of C4, empower financial statements 1-j: Manage the Army's GIG contribution as an 1-c: Embrace small unit operations National Military Strategy, 4-d: Define & implement an Enterprise: GuardNet (3300 Sites), ARNet AAIC for acquisition to ensure systems are (Imperative 5) Transformation Planning Guidance, Joint from birth (Imperative 4) Army Portfolio Management (940 Sites), and Army Networks (Imperative 1-d: Lead Army campaign for Joint Operations Concepts, DOD process consistent with OSD 2-e/5-c: Adopt governance and cultural bandwidth (Imperative 6) architecture framework, Army changes to become a knowledge-based policy -Realign and optimize for the Joint Warfighter 1-g: Develop and implement, in 4-f: Develop & submit 3-a: Develop an efficient and enforceable IA Strategic Planning Guidance, organization (AKM Goal 1) coordination with Army mission management process Army Campaign Plan, and Reserve 2-g: Integrate knowledge management Information Technology areas and domains, the Army 3-c: Employ defense-in-depth strategies to Forces Policy concepts and best practices to promote the enterprise architecture and its use defend systems and networks to ensure that 6-b: Ensure that appropriate IM/IT knowledge-based force: (AKM Goal 2) in guiding information technology no access is uncontrolled and that all architectural models and -Build knowledge sharing and collaboration into Army solutions and acquisitions to systems and networks are capable of selfsimulations are defined, resourced support joint functional -Guide the transformation of Army processes end-todefense and developed to inform all requirements 3-d: Reduce the vulnerability of the NIPRnet relevant DOD. Joint and Army 1-k: Ensure the AEA provides a 2-h: Institutionalize Army Knowledge Online as through use of CAC and PKI planning processes comprehensive set of Operational. the Enterprise portal to provide universal, 3-e: Define data protection requirements for 6-c: Create one integrated IM/IT Systems and Technical secure access for the Institutional and network-centric operations, and develop and strategic plan (and associated architectures Operational Army: (AKM Goal 4) deploy robust protection mechanisms implementation plans) for the Army 2-k: Implement the DoD Data Strategy -Expand AKO as the Army's self-service 6-d: Manage each CIO/G6 strategic across the Enterprise center for networked knowledge management 3-f: Ensure accurate and timely compliance with goal and integration of the -Improve information availability and knowledge policies, procedures and laws to include objectives through implementation plans, progress indicators, -Assure reliable and sustainable content life cycle measures and review schedules management 3-h: Create a secure enterprise environment 2-I: Leverage eGov initiatives to increase Army that enables effective information sharing 6-e: Strategically reprioritize IM/IT 3-i: Ensure that the information assurance planning and POM (resource) 3-g: Develop executable policy that supports an architecture, tools and processes are submissions and strategically integrated throughout the lifecycle of the guide PEG deliberations enterprise approach to Computer Network enterprise to include tactical systems 6-f: Provide change agent support to 5-a: Define IM/IT competencies and establish key strategic initiatives professional development standards and practices 5-b: Identify, develop, and provide relevant C4 IT education and training for all civilians and soldiers in coordination with the Signal Center 5-d: Build an agile, adaptive workforce with flexible skill sets for current and emerging requirements and focused on results and performance

Administration (IRI)

IRI 5-e: Ensure quality personnel administration support for civilian, military and contractors in the CIO/G-6

Governance (GA&CKO)

Enterprise Resource Planning & Business Process Engineering (AEIOO)

AEIOO 2-i: Provide policy and guidance for the implementation and integration of Army ERP solutions 2-i: Use Business Process Improvement as a transformation enabler